



A CUMULATIVE INDEX

TO THE 1977 ISSUES OF

AERONAUTICAL
ENGINEERING

A SPECIAL BIBLIOGRAPHY

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The abstract sections of the monthly supplements of *Aeronautical Engineering* can be bound separately. Individual abstracts can be located readily by means of the page numbers given at each entry, e.g., p331 N77-23063. To assist the user in binding Supplements SP-7037 (80) through SP-7037 (91), a title page is included in the back of this Cumulative Index.

NASA SP-7037 (92)

**A CUMULATIVE INDEX
TO
AERONAUTICAL ENGINEERING
A Special Bibliography**

**This Cumulative Index supersedes the indexes
contained in supplements SP-7037 (80) through
SP-7037 (91).**



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INTRODUCTION

WHAT THIS CUMULATIVE INDEX IS

This publication is a cumulative index to the abstracts contained in NASA SP-7037(80) through NASA SP-7037(91) of *Aeronautical Engineering A Special Bibliography* NASA SP-7037 and its supplements have been compiled through the cooperative efforts of the American Institute of Aeronautics and Astronautics (AIAA) and the National Aeronautics and Space Administration (NASA). Entries prepared by the two contributing organizations are identified as follows:

- 1 NASA entries by their *STAR* accession numbers (N77-10000 series)
- 2 AIAA entries by their *IAA* accession numbers (A77-10000 series)

HOW THIS CUMULATIVE INDEX IS ORGANIZED

This Cumulative Index includes a subject index, a personal author index, a corporate source index, a contract number index, and a report/accession number index.

HOW TO USE THE SUBJECT INDEX

Two types of cross-references appear in the subject index:

- 1 Use (U) references indicate that the subject term is not "postable," i.e., not a valid term, and the following term or terms are used instead. For example:

AIRCRAFT PROTUBERANCES
U PROTUBERANCES
FLIGHT PERFORMANCE
U FLIGHT CHARACTERISTICS

- 2 Narrower Term (NT) references refer the user to more specific headings in the same subject area, under which additional material on the subject may be found. For example:

FLOW RESISTANCE
NT AERODYNAMIC DRAG
NT FRICTION DRAG
NT SUPERSONIC DRAG

In addition, a searcher may use the title or title and title extension in the index to narrow further his quest for particular items. This is because subject terms readily include more than one class of document. For example:

AIRLINE OPERATIONS
All-weather operations, including
pilot role, instrument landing
systems and guidance aids
Airport congestion as constraint on
air travel, considering runway
capacity and adjusted demand

illustrates a case where two references on different topics are listed under the same subject term.

HOW TO USE THE PERSONAL AUTHOR INDEX

All personal authors used in the abstract-section citations in the individual Supplements appear in the index. Differences in transliteration schemes may require multiple searching of the index for variants of an author's name. For example

EMELIANOV, M D
and
YEMELYANOV, M D

HOW TO USE THE CORPORATE SOURCE INDEX

The corporate source index entries are abridged versions of the corporate sources used in the abstract-section citations in the individual Supplements. The corporate source supplementary (organizational component) does not appear in the index. For example

BOEING CO , SEATTLE, WASH MILITARY AIRCRAFT SYSTEMS DIV
(Source citation entry)
BOEING CO , SEATTLE, WASH
(Source index entry)

HOW TO USE THE CONTRACT NUMBER INDEX

All contract numbers that are identified in the abstract-section citations in the individual Supplements appear in this index. Changes by agencies in the style in which contract numbers are presented may require multiple searching for variants. For example

AF 33(615)-71-C-1758
F33615-71-C-1758

HOW TO USE THE REPCRT/ACCESSION NUMBER INDEX

All report numbers that have been assigned by the corporate source, monitoring agency or cataloging activity appear in this index. Variations in initial cataloging may result in different report number series. For example

TP-924
ONERA-TP-924

IDENTIFICATION OF DESIRED SUPPLEMENT

The abstract and descriptive cataloging for any accession number selected from the indexes may be found in the appropriate Supplement. The page-number range of each Supplement appears on the inside front cover of this index. Once the range of page numbers containing the selected accession number is located in the second column, the desired Supplement number will be found in the first column. For example

Page 331 will be found in Supplement 86

AVAILABILITY OF DOCUMENTS

Information concerning the availability of documents announced in the *Aeronautical Engineering* supplements is found in the Introduction to the most currently issued monthly supplement

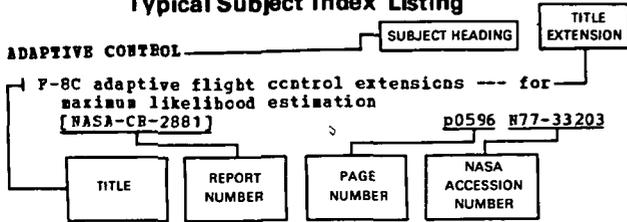
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SUBJECT INDEX

1977 Cumulative Index

Typical Subject Index Listing



The title is used to provide a description of the subject matter. When the title is insufficiently descriptive of the document content a title extension is added separated from the title by three hyphens. The STAR or IAA accession number is included in each entry to assist the user in locating the abstract in the abstract section of an individual issue of *Aeronautical Engineering*. If applicable a report number is also included as an aid in identifying the document. The page and accession numbers are located beneath and to the right of the title. Under any one subject heading the accession numbers are arranged in sequence with the IAA accession numbers appearing first.

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- Statistical analyses applied to the US Navy aircrew automated escape systems
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- Statistical analysis of US Navy major aircraft accident rates, pilot and aircraft time-dependent variables
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- policy; Proceedings of the Workshop Conference, Crystal City, Va., March 10-12, 1976
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- European Rotorcraft and Powered Lift Aircraft Forum, 1st, University of Southampton, Southampton, England, September 22-24, 1975, Proceedings
p0005 A77-11276
- The technical basis for a national civil aviation research, technology, and development /BT & D/ policy; Proceedings of the Workshop Conference, Crystal City, Va., March 10-12, 1976
p0016 A77-12927
- Problems with fatigue in aircraft; Proceedings of the Eighth Symposium and Colloquium, Lausanne, Switzerland, June 2-5, 1975
[ICAF-DOC-801] p0047 A77-13751
- Israel Annual Conference on Aviation and Astronautics, 18th, Tel Aviv and Haifa, Israel, May 19, 20, 1976, Proceedings
p0053 A77-15026
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p0099 A77-17026
- International Symposium on Air Breathing Engines, 3rd, Munich, West Germany, March 7-12, 1976, Proceedings
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- Symposium on Aeroelasticity in Turbomachines, Ecole Nationale Supérieure de Techniques Avancées, Paris, France, October 18-23, 1976, Proceedings
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- Deutsche Gesellschaft fuer Luft- und Raumfahrt, Shell Buckling Meeting, Meersburg, West Germany, April 29, 30, 1976, Reports and Discussion Contributions
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- Symposium on the Presentation of Information to Pilots, London, England, March 18, 1976, Proceedings
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- Structures, Structural Dynamics and Materials Conference, 18th, March 21-23, 1977, and Aircraft Composites: The Emerging Methodology for Structural Assurance, San Diego, Calif., March 24, 25, 1977, Technical Papers. Volume A - Structures and materials

- p0203 A77-25726
Structures, Structural Dynamics and Materials Conference, 18th, March 21-23, 1977, and Dynamics Specialist Conference, San Diego, Calif., March 24, 25, 1977, Technical Papers. Volume B - Dynamics, structural dynamics
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Symposium on Rotor Technology, Essington, Pa., August 11-13, 1976, Proceedings
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V/STOL Conference, Palo Alto, Calif., June 6-8, 1977, Technical Papers
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International Conference on the Future of Aircraft All-Weather Operations, London, England, November 23-26, 1976, Proceedings
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Symposium on Avionics versus Electrics - Who Should Determine Future Power Supplies, London, England, March 15, 1977, Proceedings
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Lighter Than Air Systems Technology Conference, Melbourne, Fla., August 11, 12, 1977, Technical Papers
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Gas turbines - Status and prospects; Proceedings of the Symposium, London, England, February 4, 5, 1976
- p0511 A77-46401
The RPV - Complement to manned systems; Proceedings of the Fourth Annual Symposium, Washington, D.C., June 5-9, 1977
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Fatigue 1977; Proceedings of the Conference, Cambridge University, Cambridge, England, March 28-30, 1977
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Survival and Flight Equipment Association, Annual Symposium, 14th, San Diego, Calif., September 13-16, 1976, Proceedings
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[PB-267651/8] p0537 N77-31116
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[PB-267648/4] p0537 N77-31119
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Turbine engine technology demonstrator component
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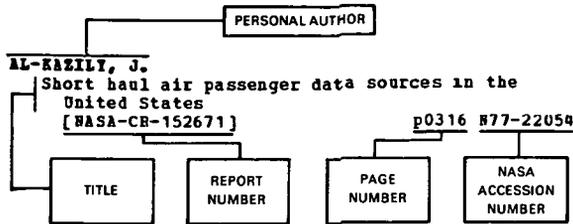
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- BLENN, H.
Deutsche Gesellschaft fuer Luft- und Raumfahrt,
Yearbook 1975. Volumes 1 & 2 p0115 A77-18600
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Wind tunnel flow seeding for laser velocimetry
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Problems with fatigue in aircraft; Proceedings of the Eighth Symposium and Colloquium, Lausanne, Switzerland, June 2-5, 1975
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Investigation of rotating stall phenomena in axial flow compressors. Volume 2: Investigation of rotor-stator interaction noise and lifting surface theory for a rotor
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Advanced surface paneling method for subsonic and supersonic flow
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Viscous perturbation effects on hypersonic unsteady aerodynamics
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Calculations of two-dimensional boundary layer parameters in subsonic flow around leading edge slats and wing noses
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[AD-A036892] p0428 N77-26119
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Microcomputer RPV stabilization and control system
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Elaboration of a system of preventive personalized maintenance of jet engines

- ESSLINGER, H. p0201 A77-25282
Deutsche Gesellschaft fuer Luft- und Raumfahrt,
Shell Buckling Meeting, Heersburg, West Germany,
April 29, 30, 1976, Reports and Discussion
Contributions
- ESSLINGER, P. p0148 A77-20573
Development of materials used in gas turbine
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A laboratory investigation into flight path
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Hot corrosion studies of four nickel-base
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Publications in acoustics and noise control from
the NASA Langley Research Center during 1940-1976
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- FUCHS, H. V.
Basic aerodynamic noise theory
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Experimental investigations of supersonic cascades
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A systems approach to all weather landings
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- Theoretical parametric study of the relative
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 The 3000-HP roller gear transmission development
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 A practical approach to the prediction of
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Deutsche Gesellschaft fuer Luft- und Raumfahrt, Shell Buckling Meeting, Meersburg, West Germany, April 29, 30, 1976, Reports and Discussion Contributions p0148 A77-20573
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The technical basis for a national civil aviation research, technology, and development /RT & D/ policy; Proceedings of the Workshop Conference, Crystal City, Va., March 10-12, 1976 p0016 A77-12927
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Are wheel-well related aeroacoustic sources of any significance in airframe noise [AIAA PAPER 77-1270] p0564 A77-51033
Unsteady surface pressure characteristics on aircraft components and farfield radiated airframe noise [AIAA PAPER 77-1295] p0565 A77-51052
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Bayesian estimation of crack initiation times from service data [AIAA 77-383] p0205 A77-25742
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System safety and the Utility Tactical Transport Aircraft System p0097 A77-16735
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Investigation of jet plume effects on the

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A review of turbopropulsion combustion. Part 1: Fundamentals of combustion. Part 2: Turbopropulsion combustion technology
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A research program to reduce interior noise in general aviation airplanes
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Effects of wing leading-edge radius and Reynolds number on longitudinal aerodynamic characteristics of highly swept wing-body configurations at subsonic speeds
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Adaptive control laws for F-8 flight tests
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- HENNECKE, D. K.
International Symposium on Air Breathing Engines, 3rd, Munich, West Germany, March 7-12, 1976, Proceedings
p0101 A77-17226
- HENNING, H. J.
Army aviation manufacturing technology program guidance
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The development of a carbon fiber-reinforced plastic rudder for the Alpha Jet
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Instrument flight evaluation AH-1G helicopter
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Application of numerical optimization to the design of supercritical airfoils without drag-creep
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Advanced supersonic transport propulsion
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A method for predicting the stability
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3: FLEXSTAB 1.02.00 program description
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- NASA diagonal-braked test vehicle evaluation of traction characteristics of grooved and ungrooved runway surfaces at Miami International Airport, Miami, Florida, 8-9 May 1973
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- Plastic (wire-combed) grooving of a slip-formed concrete runway overlay at Patrick Henry Airport: An initial evaluation
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Flight information for airline pilots - The certification angle p0148 A77-20605
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Adhesive bonded aerospace structures standardized repair handbook
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Airworthiness and flight characteristics evaluation C-12A aircraft
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An evaluation of very large airplanes and alternative fuels p0544 N77-31334
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- Cold air performance of a tip turbine designed to drive a lift fan. 2: Partial admission
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Flight test results of the Strapdown hexad Inertial Reference Unit (SIRO). Volume 1: Flight test summary [NASA-TN-73163] p0427 N77-26111
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Rotorcraft flight simulation with coupled rotor aeroelastic stability analysis. Volume 3: Programmer's manual [AD-A0429C7] p0581 N77-32143
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The composite technology - Its possibilities and its risks /Hugo Junkers Lecture/ p0356 A77-36390
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Two point velocity measurements in a three
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A potential low NOx emission combustor for gas
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ogive-nosed circular cylinders p0116 A77-18879
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Task-Oriented Flight Control Systems:
Introduction and overview p0432 N77-26162
Bibliography on task-oriented flight
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hypersonic aircraft nozzle design and
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Upstream influence on the near field of a plane
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Feasibility of modern airships - Design definition
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The investigation of dynamic gun pointing errors
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elastically responding structures
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elastically responding structures p0532 N77-31075
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analysis approach p0011 A77-12455
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for transverse magnetic plane wave
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Specific heat of components of working fluids used
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Investigation of the flow pattern at the engine
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Flight mechanics. Collection of papers dedicated
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Further observations on maximum likelihood
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Measurement-data system for investigating the
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ASOP-3 - A program for the optimum design of
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Transonic rotor aerodynamics: Fundamentals of the
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Profile flows taking cavitation bubble dynamics
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Design and development of a high-pressure
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p0265 A77-28606
- ISHII, S.
Secondary gas injection into a supersonic conical
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Analytic and experimental study of turbine rotor
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Investigation of strongly underexpanded submerged
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Gradient method of navigation
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Variable geometry air cycle machine
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NSEG, a segmented mission analysis program for low and high speed aircraft. Volume 1: Theoretical development
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p0544 N77-31177
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Measurement and prediction of structural and
biodynamic crash-impact response; Proceedings of
the Winter Annual Meeting, New York, N.Y.,
December 5-10, 1976
p0454 A77-42564
- SAGERSEER, D. R.**
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Film cooling of heated turbine surfaces at
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A novel concept for suppressing internally
generated aircraft engine noise [AIAA PAPER 77-1356] p0569 A77-51109
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Inverse computation of profile shapes for given transonic flow-configurations with and without detached bow-shocks in two-dimensional turbomachinery cascades [ASME PAPER 77-GT-33] p0263 A77-28548
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The propulsion system of the aircraft Z-37. I p0159 A77-22121
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- Identification of aircraft aerodynamic characteristics at high angles of attack and sideslip using the estimation before modeling /EBM/ technique
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F-111a wing fatigue test program
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- Monte Carlo simulation of VOR/DME holding procedures. Basic notions and applications
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Deutsche Gesellschaft fuer Luft- und Raumfahrt, Yearbook 1975. Volumes 1 & 2
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High lift-drag ratio hypersonic tests and flap heating investigations
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Aerial reconnaissance systems; Proceedings of the Seminar, Reston, Va., March 24, 25, 1976 p0190 A77-23517
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Airframe noise of component interactions on a large transport model
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Prediction of helicopter rotor performance in vertical climb and sideward flight
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The next SST - What will it be
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Low-speed wind-tunnel investigation of the longitudinal stability characteristics of a model equipped with a variable-speed wing, 23 May 1949
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Preliminary test results of the joint FAA-USAF-NASA runway research program. Part 1: Traction measurements of several runways under wet and dry conditions with a Boeing 727, a diagonal-braked vehicle, and a mu-meter
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 A research program to reduce interior noise in

- general aviation airplanes
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Application of numerical optimization to the
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Remarks on the suitability of various transonic
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Aluminium alloy development and evaluation for
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The need of stick force stability for
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Digital flight control systems
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Development of a graphite horizontal stabilizer
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Estimation of drag and thrust of jet-propelled
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On the maintenance of aircraft engines. A
bibliography, 1968 - 1975
[TDCK-67505] p0335 N77-23107
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Ceramic airframe bearings
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Structural reliability prediction method
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Utility Tactical Transport Aircraft System
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Foundation of the magnetic field integral equation
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Application of nonlinear programming methods to
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Radar systems with phased-array antennas
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the basic dimensions of the force elements of
aircraft structures
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A navigation device to help helicopters to land on
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- VATAZHIN, A. B.**
Electric pulsations in turbulent electrodynamic
flows
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Quasi-three-dimensional laminar boundary-layer
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Influence of the noise level in a transonic wind
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High-speed helicopter impulsive noise
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Acoustically swept rotor
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Reduction of the drag of a planar polywedge body
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Investigation of feasible nozzle configurations
for noise reduction in turbofan and turbojet
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Design criteria for aircraft warning, caution and
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Dynamic response of an elastic aircraft to wind
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Transport of the future and the tasks of science
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New radar for the F-13: A discounted cash flow analysis [AD-A033918] p0338 N77-23339
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Flight simulators for air warfare of the future [AIAA PAPER 77-327] p0113 A77-18246
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Effects of inviscid parallel shear flows on steady and unsteady aerodynamics and flutter [AIAA PAPER 77-158] p0140 A77-19864
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Further developments in the aerodynamic analysis of unsteady supersonic cascades. I - The unsteady pressure field [ASME PAPER 77-GT-44] p0264 A77-28557
Further developments in the aerodynamic analysis of unsteady supersonic cascades. II - Aerodynamic response predictions [ASME PAPER 77-GT-45] p0264 A77-28558
- VERDOOW, A. J.
Evaluation of a staged fuel combustor for turboprop engines [ASME PAPER 76-WA/GT-5] p0214 A77-26461
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Review of optical techniques with respect to aero-engine applications [ONERA, TP NO. 1977-80] p0562 A77-50987
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Evaluation of turbulence models for three primary types of shock-separated boundary layers [AIAA PAPER 77-692] p0414 A77-38887
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Flow effects at cross blown lifting jets of V/STOL aircraft and their reaction on aerodynamic forces and moments of the nacelle [DLR-FB-76-34] p0176 N77-17008
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Airframe technology for energy efficient transport
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Structural and cooling aspects of the ADEN
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High strength-high damping capacity wrought
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Subsystem design analysis light weight alternator
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Computation of viscous transonic flow about a
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[AIAA PAPER 77-679] p0441 A77-40700
Computation of viscous transonic flow about a
lifting airfoil
[NASA-CR-151999] p0330 N77-23054
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Computational methods and problems in aeronautical
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- WALKER, D. Q.
Aircraft sideline noise: A technical review and analysis of contemporary data
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Measurement of post-separated flowfields on airfoils
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An avionics design philosophy for a Canadian coastal patrol aircraft
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A-37B fatigue sensor evaluation program: Full scale test and field aircraft instrumentation
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Aerodynamic performance of wind turbines
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- WALKER, W.
A technology plan for electromagnetic characteristics of advanced composites
[AD-A030507] p0186 N77-17175
- WALLACHY, B. E.
Tracals evaluation report. Ground/air/ground communications special evaluation report, Sheppard AFB, Texas
[AD-A026823] p0121 N77-14003
TRACALS evaluation report. Communications station evaluation report, Kadena AB, Japan, 4 March - 16 March 1976
[AD-A029713] p0177 N77-17028
- WALSB, B.
Countdown on a new international deterrent
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Artful dodger of the 1980s
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Airframe composite materials
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- WALSH, J. D.
Design mechanical properties, fracture toughness, fatigue properties, exfoliation and stress-corrosion resistance of 7050 sheet, plate, hand forgings, die forgings and extrusions
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- WALTON, N.
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Direct-connect tests of hydrogen-fueled supersonic combustors
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Advanced V/STOL propeller critical components investigation
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Catalytic combustion of C3H8 on Pt coated monolith
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Laser velocimeter turbulence spectra measurements
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A rational new approach to the response of an aircraft encountering non-Gaussian atmospheric turbulence
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RPV video communications - A new challenge to video data compression
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Ambient temperature crack growth in titanium alloys and its significance for aircraft structures
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Calculation of stress intensity factors for corner cracking in a lug
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- Aluminium alloy development and evaluation for aircraft structural performance
[HLR-MP-76022-U] p0389 N77-25311
Ambient temperature crack growth in titanium alloys and its significance for aircraft structures
[HLR-MP-76008-U] p0494 N77-29278
- WASHER, J.-C.
Air transportation and fuel consumption
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Evolution of aircraft design through the concept of the control configured vehicle
[ONERA, TP NO. 1977-129] p0563 A77-51004
- WARD, A. P.
Fatigue load spectra for combat aircraft - Their derivation and data requirements
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- WARB, T. C.
Small axial compressor technology, volume 1
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Small axial compressor technology, volume 2
[NASA-CR-134827-VOL-2] p0035 N77-11049
- WARNE, E. H.
Some experience with small engines
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- WARNER, D. W., JR.
Flight evaluation of advanced flight control systems and cockpit displays for powered-lift STOL Aircraft
p0226 N77-18084
- WARNOCK, W.
An analytical study for subsonic oblique wing transport concept
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Safety criteria for fail-operational autoland systems and their application
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Numerical methods for extracting MIL-F-8785B/ASG/Flying Qualities parameters from flight test data
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An extended prediction model for airplane braking distance and a specification for a total braking prediction systems, volume 2
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- WARSJI, Z. U. A.
Numerical solutions for laminar and turbulent viscous flow over single and multi-element airfoils using body-fitted coordinate systems
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Program documentation for the digital switching experiment program
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Determination of antenna radiation patterns, radar cross sections and jam-to-signal ratios by flight tests
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Load distribution on a close-coupled wing canard at transonic speeds
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- WINTERFELD, G. International Symposium on Air Breathing Engines, 3rd, Munich, West Germany, March 7-12, 1976, Proceedings p0101 A77-17226
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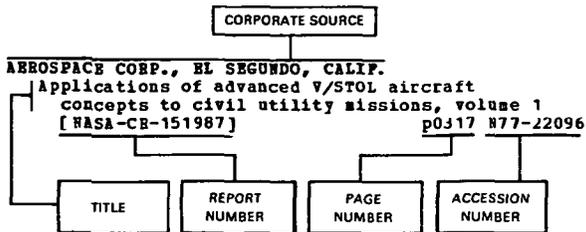
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ARMY AVIATION SYSTEMS TEST ACTIVITY, EDWARDS AFB,
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ARMY COLD REGIONS RESEARCH AND ENGINEERING LAB.,
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ARMY TRAINING SUPPORT CENTER, FORT EUSTIS, VA.
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Automatic target hand-off using correlation
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AVCO LYCOMING ENGINE GROUP, STRATFORD, CONN.
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AVIONS MARCEL DASSAULT-BREGUET AVIATION,
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- B**
- BALLISTIC RESEARCH LABS., ABERDEEN PROVING GROUND,
MD.
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BATTILLE COLUMBUS LABS., MOUNTAIN VIEW, CALIF.
NASA aviation safety reporting system
[NASA-TM-X-3546] p0365 N77-24076
BATTILLE COLUMBUS LABS., OHIO.
Aircraft propulsion lubricating film additives:
Boundary lubricant surface films, volume 3
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Army aviation manufacturing technology program
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BATTILLE PACIFIC NORTHWEST LABS., RICHLAND, WASH.
Application of sputter-deposited lamellar
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high temperature turbine blade materials and
airfoil fabrication
[AD-A037349] p0431 N77-26151
BEECH AIRCRAFT CORP., WICHITA, KANS.
In-flight measurements of the GA/W/-2
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[SAE PAPER 770461] p0393 A77-37079
BELL HELICOPTER CO., FORT WORTH, TEX.
Performance and safety aspects of the XV-15 tilt
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Rotorcraft flight simulation with coupled rotor
aeroelastic stability analysis. Volume 1:
Engineer's manual
[AD-A042462] p0596 N77-33207
BENDIX RESEARCH LABS., SOUTHFIELD, MICH.
Acoustic emission investigation - helicopter
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Format practices for documenting time critical,
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BODENSEEWERK GERATE-TECHNIK G.M.B.H., UEBERLINGEN
(WEST GERMANY).
Failure self-detection in digital flight
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BOEING AEROSPACE CO., SEATTLE, WASH.
Tenth-scale powered model test of a tilt-facelle
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- BOEING CO., HOUSTON, TEX.
Sneak circuit analysis application to control system design p0376 N77-25067
- BOEING CO., RENTON, WASH.
Test data report: Low speed wind tunnel tests of a full scale, fixed geometry inlet, with engine, at high angles of attack [NASA-CR-151927] p0127 N77-14996
- BOEING CO., SEATTLE, WASH.
Fan inlet for a V/STOL airplane [AIAA PAPER 77-802] p0409 A77-38544
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- BOEING CO., WICHITA, KANS.
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An extended prediction model for airplane braking distance and a specification for a total braking prediction systems, volume 2 [AD-A039967] p0531 N77-30476
- BOEING COMMERCIAL AIRPLANE CO., SEATTLE, WASH.
Methods of reducing low frequency cabin noise and sonically induced stresses, based on the intrinsic structural tuning concept [AIAA 77-444] p0209 A77-25802
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- BOEING COMPUTER SERVICES, INC., SEATTLE, WASH.**
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- DOUGLAS AIRCRAFT CO., INC., SANTA MONICA, CALIF.
Structures and Materials
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- DRAPER (CHARLES STARK) LAB., INC., CAMBRIDGE, MASS.
A reliable dual-redundant sensor FDI system for the NASA F8C-DFBW aircraft
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- Spacecraft flight control with the new phase space control law and optimal linear jet select
[AIAA 77-1071] p0455 A77-42781
- DREXEL UNIV., PHILADELPHIA, PA.
Impact behavior of polymeric matrix composite materials
[AD-A038188] p0481 N77-28316
- DURHAM UNIV. (ENGLAND).
Through-flow calculations in axial turbomachinery: A technical point of view
p0066 N77-12015
- DYNAMICS RESEARCH CORP., WILMINGTON, MASS.
Mid-1980s digital avionics information system conceptual design configuration
[AD-A032137] p0318 N77-22103
- DYTEC ENGINEERING, INC., HUNTINGTON BEACH, CALIF.
Recommended procedures for measuring aircraft noise and associated parameters
[NASA-CR-145187] p0389 N77-25912
- E**
- EDINBURGH UNIV. (SCOTLAND).
Vibration of helicopters
p0327 N77-22521
- ELECTROMAGNETIC COMPATIBILITY ANALYSIS CENTER, ANNAPOLIS, MD.
A model to predict mutual interference effects on an airframe
[AD-A039224/1] p0495 N77-29347
- ELCO ENGINEERING, INC., COMPTON, CALIF.
Transonic performance of Mach 2.65 auxiliary flow axisymmetric inlet
[NASA-CR-2747] p0023 N77-10056
- ENGLHARD MINERALS AND CHEMICALS CORP., EDISON, N. J.
High temperature thermocouple system for advanced aircraft turbine engines
[AD-A025500] p0037 N77-11062
- ENGINEERING SCIENCES DATA UNIT, LONDON (ENGLAND).
Aerodynamic centre of wing-fuselage combinations
[ESDU-76015] p0127 N77-14992
- Buckling of struts. Lipped and unlipped channel sections
[ESDU-76023] p0326 N77-22502
- Effect of intake total pressure loss on net thrust at take-off: Turbojet and turbo-fan engines
[ESDU-77001] p0491 N77-29149
- ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, D. C.
Development of EPA aircraft piston engine emission standards
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- Application of automobile emission control technology to light piston aircraft engines
p0184 N77-17083
- Noise standards for aircraft type certification (modifications to Part 36)
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- EUROPEAN SPACE AGENCY, PARIS (FRANCE).
Three-component measurements on a model of a light STOL aircraft with chordwise blowing
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- Theoretical and experimental investigations on landing gear spring blades out of fiber reinforced plastic for small aircraft
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[ESA-TT-401] p0488 N77-29108
- Monte Carlo simulation of VOR/DHE holding procedures. Basic notions and applications
[ESA-TT-419] p0588 N77-33142
- EXION RESEARCH AND ENGINEERING CO., LINDEM, N. J.
Evaluation of methods to produce aviation Turbine fuels from synthetic crude oils, phase 2, volume 2
[AD-A036190] p0482 N77-28325
- Development of high stability fuel, phase 3
[AD-A038977] p0495 N77-29322
- Development of a catalytic combustor for aircraft gas turbine engines
[AD-A040135] p0543 N77-31171
- F**
- FACILITY CHECKING SQUADRON (1868TH) (AFCS), APO NEW YORK 09332.
Radar special evaluation report: Degradation of

- AN/UPX-6 interrogator set identification
friend or foe/selective identification feature
IPF/SIF returns from F-4 and RF-4 aircraft
[AD-A027417] p0132 N77-15241
- TRACALS evaluation report. NAVAIDS station
evaluation report, Aviano AB, Italy (16-23
August 1976)
[AD-A038062] p0475 N77-28106
- FACILITY CHECKING SQUADRON (1866TH) (AFCS),
RICHARDS-GBBAUR AFB, MO.
Tracals evaluation report. Ground/air/ground
communications special evaluation report,
Sheppard AFB, Texas
[AD-A026823] p0121 N77-14003
- TPACALS evaluation report. Communications
station evaluation report, Kadena AB, Japan, 4
March - 16 March 1976
[AD-A029713] p0177 N77-17028
- Communications station evaluation report,
Selfridge ANGB, Michigan, 9-18 November 1976
[AD-A037479] p0428 N77-26120
- TRACALS evaluation report. ILS station
evaluation report, Luke AFB, AZ 1 - 13
December 1976
[AD-A038390] p0434 N77-27102
- FAIRCHILD REPUBLIC CO., FARMINGDALE, N. Y.
Higher harmonic rotor blade pitch control
[AD-A024479] p0244 A77-26860
- FEDERAL AVIATION ADMINISTRATION, WASHINGTON, D. C.
A crashworthiness analysis with emphasis on the
fire hazard: US and selected foreign turbine
aircraft accidents 1964-1974
[AD-A029162/5] p0077 N77-13023
- FAA category 3 instrument landing system: A
ground equipment development overview
[AD-A030150/7] p0077 N77-13031
- A comparison of air radionavigation systems (for
helicopters in off-shore areas)
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- Collocated flight service station/Air Route
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[AD-A031099/5] p0133 N77-15579
- Emissions data by category of engines
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- Considerations of high altitude emissions
[AD-A031099/5] p0220 N77-18025
- Model users manual for airfield capacity and
delay models, book 2
[AD-A036354] p0323 N77-22149
- FAA air traffic activity, fiscal year 1976
[AD-A032260] p0333 N77-23083
- SRDS technical program document: Fiscal year
1977 engineering and development approved
programs
[AD-A034195] p0366 N77-24093
- Impact of automation upon air traffic control
system productivity/capacity (ARTS III)
[AD-A038659] p0434 N77-27094
- Boston Air Route Traffic Control Center (ARTCC)
lighting study
[AD-A041324] p0489 N77-29124
- FAA air traffic activity, calendar, year 1976
[AD-A040474] p0490 N77-29134
- Helicopter noise measurements data report.
Volume 1: Helicopter models: Hughes 300-C,
Hughes 500-C, Bell 47-G, Bell 206-L
[AD-A040561] p0497 N77-29919
- Helicopter noise measurements data report.
Volume 2: Helicopter models: Bell 212
(UH-1H), Sikorsky S-61 (SH-3A), Sikorsky S-64
Skycrane (CH-54B), Boeing Vertol Chinook
(CH-47C)
[AD-A040562] p0497 N77-29920
- Noise levels for turbojet powered airplanes and
large propeller driven airplanes: Notice of
proposed rule making
[AD-A040562] p0541 N77-31150
- FIBER SCIENCE, INC., GARDENA, CALIF.
Design, fabrication, and testing of advanced
composite AH-1G tail section (tail
boom/vertical fin)
[AD-A034457] p0367 N77-24106
- FLORIDA STATE UNIV., TALLAHASSEE.
An experimental investigation of the trailing
edge noise mechanism
[AIAA PAPER 77-1291] p0565 A77-51049
- FLORIDA UNIV., GAINESVILLE.
A subsonic flow investigation on a research body
at high angles of attack
[AIAA PAPER 77-180] p0162 A77-22240
- FLOW RESEARCH, INC., KENT, WASH.
Application of finite element approach to
transonic flow problems
[AD-A031099/5] p0519 A77-47539
- Study of design and analysis methods for
transonic flow
[NASA-CR-152041] p0524 N77-30086
- FLUGZEUGWERKE, EMMEN (SWITZERLAND).
PALSTAFF. Description of a fighter aircraft
loading standard for fatigue evaluation
[AD-A031099/5] p0074 N77-12430
- FORSCHUNGSINSTITUT FUER ANTHROPOTECHNIK, HECKENHEIM
(WEST GERMANY).
Comparative experimental evaluation of
two-dimensional and pseudo-perspective
displays for guidance and control
[AD-A031099/5] p0171 N77-16053
- Methods of noise simulation and their
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[FB-22] p0494 N77-29179
- FRANKFORD ARSENAL, PHILADELPHIA, PA.
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- Wake region perturbation for base drag reduction
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- FRANKLIN INST. RESEARCH LABS., PHILADELPHIA, PA.
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[AD-A031099/5] p0288 N77-21036
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application to high speed large turbines
[AD-A031099/5] p0066 N77-12020
- GENERAL DYNAMICS/CONVAIR, SAN DIEGO, CALIF.
An automated procedure for preliminary design of
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[ASME PAPER 76-WA/AERO-9] p0213 A77-26404
- Nonlinear lifting line theory for predicting
stalling instabilities on wings of moderate
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[NASA-CR-145104] p0128 N77-15029
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stall
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program, semi-span wind tunnel test of a
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- The transonic oscillating flap: A comparison of
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The design, analysis, and testing of a
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Prediction of transonic aircraft buffet response
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ASD advanced program research inlet data analysis report for 1/5.2-scale model inlet tests
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GENERAL ELECTRIC CO., BINGHAMTON, N.Y.
 The 150 KVA samarium cobalt VSCP starter generator electrical system, phase 1
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GENERAL ELECTRIC CO., CINCINNATI, OHIO.
 Quiet, Clean, Short-Haul Experimental Engines /QCSEE/ - A technology development program
 [ASME PAPER 77-GT-109] p0265 A77-28618

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 [AIAA PAPER 77-840] p0451 A77-41974

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Single-stage, low-noise, advanced technology fan. Volume 4: Fan aerodynamics. Section 1: Results and analysis
 [NASA-CR-134892] p0181 N77-17060

Single stage, low noise, advanced technology fan. Volume 4: Fan aerodynamics. Section 2: Overall and blade element performance data tabulations
 [NASA-CR-134893] p0182 N77-17061

Thrust reverser design studies for an over-the-wing STOL transport
 [NASA-CR-151958] p0239 N77-19071

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Supersonic jet exhaust noise investigation. Volume 3: Computer users manual for aero-acoustic predictions
 [AD-A038614] p0478 N77-28127

NASA/Navy lift/cruise fan. Phase 1: Design summary
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Digital shaft encoder
 [AD-A040706] p0543 N77-31172

Platform for a swing root turbomachinery blade
 [NASA-CASE-LEW-12312-1] p0582 N77-32148

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Supersonic jet exhaust noise investigation. Volume 4: Acoustic far-field/near-field data report
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GENERAL ELECTRIC CO., EVENDALE, OHIO.
 Measured effects of coolant injection on the performance of a film cooled turbine
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 Status of research into lightning effects on aircraft
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GENERAL ELECTRIC CO., PHILADELPHIA, PA.
 Advanced supersonic technology study: Engine program summary. Supersonic propulsion: 1971 - 1976
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Coannular plug nozzle noise reduction and impact of exhaust system designs
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 Laser velocimeter turbulence spectra measurements
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GENERAL ELECTRIC CO., WILMINGTON, MASS.
 Solid state vertical scale indicator for engine performance indication
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GENERAL MOTORS CORP., INDIANAPOLIS, IND.
 Evaluation of a staged fuel combustor for turboprop engines
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 M and T-pultruded composite structural elements
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- GOODYEAR AEROSPACE CORP., AKRON, OHIO.
 Feasibility of modern airships - Design definition and performance of selected concepts [AIAA PAPER 77-331] p0113 A77-18249
 Feasibility study of modern airships, phase 2. Volume 1: Heavy lift airship vehicle. Book 1: Overall study results [NASA-CR-151917] p0331 N77-23056
 Feasibility study of modern airships, phase 2. Volume 2: Heavy lift airship vehicle. Book 2: Appendixes to book 1 [NASA-CR-151918] p0331 N77-23057
 Feasibility study of modern airships, phase 2. Volume 1: Heavy lift airship vehicle. Book 3: Aerodynamic characteristics of heavy lift airship as measured at low speeds [NASA-CR-151919] p0331 N77-23058
 Feasibility study of modern airships, phase 2. Volume 2: Airport feeder vehicle [NASA-CR-151920] p0331 N77-23059
- GOODYEAR AEROSPACE CORP., LITCHFIELD PARK, ARIZ.
 Environmental resistance of coated and laminated polycarbonate transparencies [AD-A026412] p0125 N77-14213
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- H**
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- HAWKER SIDDELEY AVIATION LTD., DUNSFOLD (ENGLAND).
 Flight testing techniques, autumn 1976 p0368 N77-24109
- HAWKER SIDDELEY AVIATION LTD., KINGSTON UPON THAMES (ENGLAND).
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- HAWKER SIDDELEY AVIATION LTD., LONDON (ENGLAND).
 Practical applications of fracture mechanics techniques to aircraft structural problems p0327 N77-22555
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- I**
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- ILLINOIS UNIV., URBANA-CHAMPAIGN.
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MCDONNELL-DOUGLAS CORP., LONG BEACH, CALIF.

A general method for calculating three-dimensional compressible laminar and turbulent boundary layers on arbitrary wings
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MESSERSCHMITT-BOELKOW-BLOHM G.M.B.H., MUNICH (WEST GERMANY).

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MESSERSCHMITT-BOELKOW-BLOHM G.M.B.H., OTTOBRUNN (WEST GERMANY).

Theoretical method for calculation of body and wing-body configuration coefficients up to extremely high angles of attack
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MESSERSCHMITT-BOELKOW G.M.B.H., MUNICH (WEST GERMANY).

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- MITRE CORP., BEDFORD, MASS.
MAC air cargo data entry: 2. Photography of shipping labels
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- MAC air cargo data entry: 3. Initial testing of on-line terminal, digital recorder, and checksheet
[AD-A031455] p0316 N77-22058
- Stereographic projection in the joint surveillance system
[AD-A031343] p0332 N77-23081
- MITRE CORP., MCLEAN, VA.
The terminal area automated path generation problem
[AIAA 77-1055] p0455 A77-42767
- Multi-site intermittent positive control algorithms for the discrete address beacon system, revision 2
[AD-A026515] p0121 N77-14006
- MODEEN ANALYSIS, INC., RIDGEWOOD, N. J.
Development of reliability-based aircraft safety criteria: An impact analysis, volume 1
[AD-A032164] p0316 N77-22059
- Development of reliability-based aircraft safety criteria: An impact analysis. Volume 2: Computer manual
[AD-A031951] p0317 N77-22060
- MOHSANTO RESEARCH CORP., DAYTON, OHIO.
Environmental degradation of fuels, fluids and related materials for aircraft
[AD-A026908] p0132 N77-15214
- Research on heat resistant transparent interlayers based on the ethylene terpolymer
[AD-A033549] p0325 N77-22269
- MOHSANTO RESEARCH CORP., ST. LOUIS, MO.
Development of a gas turbine engine oil for bulk oil temperatures of -40 to 465 F, part 2
[AD-A027068] p0131 N77-15202
- MOTOREN- UND TURBINEN-UNION MUEENCHEN G.M.B.H. (WEST GERMANY).
Advanced engine design concepts and their influence on the performance of multi-role combat aircraft
p0320 N77-22116
- Experience with a one stage variable geometry axial turbine
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- N**
- NAPLES UNIV. (ITALY).
Ram-turbojet engine for long range high terminal speed missions
p0322 N77-22132
- NATIONAL AERONAUTICAL ESTABLISHMENT, OTTAWA (ONTARIO).
On aerodynamic coupling between lateral and longitudinal degrees of freedom
[AIAA PAPER 77-4] p0160 A77-22206
- Wind tunnel test and calibration techniques for the measurement of damping and dynamic cross derivatives due to pitching and yawing
[AIAA PAPER 77-80] p0160 A77-22221
- Controlled and uncontrolled flow separation in three dimensions
[LR-591] p0030 N77-10999
- NATIONAL AERONAUTICAL LAB., BANGALORE (INDIA).
Bird strike hazards: A bibliography, 1971 - 1976
[NAL-BIBL-SER-77] p0587 N77-33131
- NATIONAL AERONAUTICS AND SPACE ADMINISTRATION, WASHINGTON, D. C.
LTA - Recent developments
p0099 A77-17021
- Computation of unsteady transonic flows by the indicial method
[AIAA 77-447] p0210 A77-25805
- Summary of NASA aerodynamic and heat transfer studies in turbine vanes and blades
[SAE PAPER 760917] p0259 A77-28225
- Aircraft fuel conservation technology. Task force report, September 10, 1975
[NASA-TN-X-74295] p0036 N77-11055
- Aeronautical Engineering: A special bibliography with indexes, supplement 74
[NASA-SP-7037(74)] N77-11967
- Aviation safety and operation problems research and technology
p0237 N77-19041
- NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. AMES RESEARCH CENTER, MOFFETT FIELD, CALIF.
Ames T-3 fire test facility - Aircraft crash fire simulation
p0108 A77-17479
- Feasibility of modern airships - Design definition and performance of selected concepts
[AIAA PAPER 77-331] p0113 A77-18249
- Transonic performance of an auxiliary airflow system for axisymmetric inlets
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- Implicit finite-difference computations of unsteady transonic flows about airfoils, including the treatment of irregular shock-wave motions
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- Investigations related to the inviscid-viscous interaction in transonic flows about finite 3-D wings
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- Numerical solution for subcritical flows by a transonic integral equation method
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[AIAA PAPER 77-450] p0257 A77-28044
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- A numerical solution of the axisymmetric jet counterflow problem
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- Variable thickness shear layer aerodynamics revisited
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AEROX: Computer program for transonic aircraft aerodynamics to high angles of attack. Volume 2: Comparisons of test cases with experiment
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AEROX: Computer program for transonic aircraft aerodynamics to high angles of attack. Volume 3: AEROX computer program listing
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- NASA diagonal-braked test vehicle evaluation of
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Airport: An initial evaluation
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- A new capability for predicting helicopter rotor
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- Publications in acoustics and noise control from
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[NASA-TM-74826] p0483 N77-29059
- An approximate spin design criterion for
monoplanes, 1 May 1939
[NACA-TN-711] p0483 N77-29060
- Spin tests of a 1/20-scale model of the XP-39
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- Spin tests of a 1/20-scale model of the XP40-1
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- Spin tests of 1/16-scale models of the N3N-3
landplane and seaplane, 12 January 1940
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- Spin tests of a low-wing monoplane to
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range, May 1941
[NACA-TM-807] p0484 N77-29064
- Methods of analyzing wind-tunnel data for
dynamic flight conditions
[NACA-TM-828] p0484 N77-29065
- The effect of cowling shape on the stability
characteristics of an airplane, September 1942
[L-343] p0484 N77-29066
- Some theoretical considerations of longitudinal
stability in power-on flight with special
reference to wind-tunnel testing, November 1942
[L-309] p0484 N77-29067
- Lateral stability and control tests of the XP-77
airplane in the NACA full-scale tunnel, 16
June 1944
p0484 N77-29068
- The lateral flying qualities of the Bell XP-77
airplane as estimated from full-scale tunnel
tests, 16 June 1944
p0484 N77-29069
- The stability and control of tailless airplanes,
19 August 1944
[REPT-796] p0484 N77-29070
- Wind-tunnel tests of a 1/4 scale model of the
Bell XS-1 transonic airplane. 1:
Longitudinal stability and control
characteristics
[L6D12] p0485 N77-29071
- Current status of longitudinal stability, 24 May
1948
[L8A28] p0485 N77-29072
- Factors affecting static longitudinal stability
and control
p0485 N77-29073
- Low-speed wind-tunnel investigation of the
longitudinal stability characteristics of a
model equipped with a variable-speed wing, 23
May 1949
[L9B18] p0485 N77-29074
- Estimated transonic flying qualities of a
tailless airplane based on a model
investigation, 8 June 1949
[L9D08] p0485 N77-29075
- Some effects of sweepback and airfoil thickness
on longitudinal stability and control
characteristics at transonic speeds
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- A comparison of the aerodynamic characteristics
at transonic speeds of four wing-fuselage
configurations as determined from different
test techniques, 4 October 1960
[L50R02] p0485 N77-29077
- Characteristics of swept wings at high speeds,
30 January 1952
[L52A15] p0486 N77-29078
- An assessment of the airplane drag problem at
transonic and supersonic speeds, 15 July 1974
[L54F16] p0486 N77-29079
- Proportioning the airplane for lateral stability
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- Low-speed wind tunnel investigation of an
advanced supersonic cruise arrow-wing
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Briefs of accidents involving air taxi operations, US general aviation, 1975
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- NUMERICAL CONTINUUM MECHANICS, INC., WOODLAWN HILLS, CALIF.
Computation of viscous transonic flow about a lifting airfoil
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- Computation of viscous transonic flow about a lifting airfoil
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- 0**
- OFFICE NATIONAL D'ETUDES ET DE RECHERCHES AEROSPATIALES, PARIS (FRANCE).
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- OFFICE OF TELECOMMUNICATIONS, BOULDER, COLO.
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- PRATT AND WHITNEY AIRCRAFT, EAST HARTFORD, CONN.**
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- Experimental clean combustor program: Noise study
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- PRATT AND WHITNEY AIRCRAFT, WEST PALM BEACH, FLA.**
Static performance of vectoring/reversing non-axisymmetric nozzles
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- Accelerated mission test: A vital reliability tool
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- PRATT AND WHITNEY AIRCRAFT GROUP, EAST HARTFORD, CONN.**
Effect of simulated forward speed on the jet noise of inverted velocity profile coannular nozzles
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- Combustion noise investigation
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Internal interaction analysis. Topological concepts and needed model improvements
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Parametric study of transport aircraft systems cost and weight
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Transonic rotor aerodynamics: Fundamentals of the theory
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SERVICE DES ETUDES DE PROPULSION, PARIS (FRANCE).
Risks affecting the structural resistance and integrity of modern propulsion systems
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SERVICE TECHNIQUE DE L'AERONAUTIQUE, PARIS (FRANCE).
Military rocket aircraft: Inherent constraints and their uses
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SHOCK AND VIBRATION INFORMATION CENTER (DEFENSE), WASHINGTON, D. C.
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regulatory forum. Volume 2: Technical report
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The market for airline aircraft: A study of
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(FRANCE).
Application of fracture mechanics to the
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Experimental solutions of acoustic fatigue
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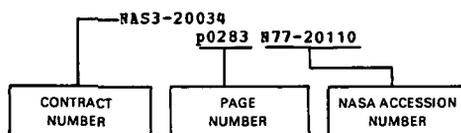
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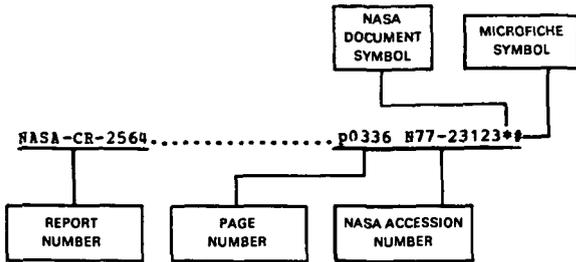
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AD-A041603	p0489	N77-29126	#	AFAPL-TR-76-48-VOL-3	p0319	N77-22109	#
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AD-A041633	p0578	N77-32085	#	AFAPL-TR-76-61-VOL-1	p0386	N77-25175	#
AD-A041730	p0592	N77-33176	#	AFAPL-TR-76-61-VOL-2	p0336	N77-23120	#
AD-A041781	p0598	N77-33686	#	AFAPL-TR-76-61-VOL-3	p0336	N77-23121	#
AD-A041782	p0593	N77-33179	#	AFAPL-TR-76-61-VOL-4	p0386	N77-25176	#
AD-A041813	p0596	N77-33206	#	AFAPL-TR-76-65-VOL-1	p0336	N77-23119	#
AD-A041819	p0593	N77-33177	#	AFAPL-TR-76-65-VOL-2	p0386	N77-25177	#
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